much pressure and directiveness?

Other findings in primary care are similar with the addendum that offers to test women in family planning clinics can produce responses approaching 97%.

An attractive hybrid of the two screening models is CF carrier screening at first diagnosis of pregnancy in general practice. Harrist et al. showed that by this approach 96% of pregnant women could be offered tests before 14 weeks (average eight weeks) and that in a small pilot study women had a very positive attitude to testing and to the primary care approach. This is a paradigm of the closer relationship between the family doctor and the clinical geneticist which is to be desired. Further studies are essential.

All these studies have identified that the community’s knowledge and education about CF must be increased. However, there are few who have set out to establish how such education is to be organised. This needs research in an arena unfamiliar to most doctors and scientists. Until this has been clarified the cautious attitude embodied in the OTA report will be more justified.


This volume is based on a symposium held in Fukuji, Japan in 1990 to mark the 20th anniversary of the founding of the International Association of Human Biologists by scientists drawn from a variety of disciplines and working within the IUBS Decade of the Tropics Programme. There are 23 contributions from individual persons and research groups based in Asia, North America, Europe, and Oceania, and the populations investigated range in the geography and climate from northern Siberia to Polynesia. Studies conducted on Japanese populations, both home based and migrant, represent the largest single grouping and account for approximately 40% of the total content.

As with the majority of symposium volumes, there is considerable divergence in the nature and content of the subject matter and the presentational style of constituent chapters. However, the editors have ensured that the degree of variation is kept within acceptable limits and four main topics can be identified: population dynamics of human isolates, biological and sociodemographic features of isolates, specific diseases associated with isolated populations, and the application of migration studies to epidemiological investigation. To a large extent, data presented on the first two topics were collected during and even before the Decade of the Tropics Programme, and so the approaches adopted and studies discussed occasionally appear slightly dated. However, since much of the material relates to population isolates in India and Japan, and originally was published in those countries, this may well be the first opportunity for its appraisal by an international readership.

The global reduction in geographical isolation experienced by human populations during the last 40 years is a common theme. This transition usually, but by no means universally, has been accompanied by an increase in marriage distance and a concomitant reduction in marriages between close biological relatives. While a short to medium term local decline in the prevalence of recessive disease orders might be expected to follow the establishment of agglomerated breeding pools, longer term changes are considerably more complex and difficult to predict. Manifestly, the accuracy of all such gene frequency predictions will be dependent on future trends with respect to isolation, whether based on geographical or other grounds. The recent reversion to ethnic and religious isolation in central and eastern Europe has shown the resilience of traditional intrapopulation marital boundaries. In a country such as India, comprising 880 million persons subdivided into tens of thousands of endogamous breeding groups, panmixia and its genetic sequela must be regarded as an improbably prospect and effectively restricted to the realms of population genetic theory.

The prevalence and distribution patterns of infectious diseases are an important, if less obvious, area in which the study of isolates can contribute to an understanding of disease evolution and dissemination. An interesting example cited is the unique strain of HTLV-I found among groups in Papua New Guinea, whose first contact with government and missionary workers was in the 1980s. More predictably, migrant populations have been extensively recruited in an attempt to examine the respective roles of genes and non-genetic factors as determinants of obesity and hypertension, and in the aetiology of common diseases of adulthood, including diabetes types 1 and 2 and ischaemic heart disease. But on the evidence presented, progress towards this goal has so far been limited.

Overall, the volume contains much information that will be of interest to workers in the general field of human variation. It is an interesting and topical, if somewhat eclectic, collection of papers which merits inclusion on the library shelf.


For aficionados, this could be the book you would choose if you were to castaway on a desert island. At any rate, such a sojourn would probably be the only chance you will have to read and digest such a massive tome. It is more than twice the size of its first edition. At first glance, it would seem to be simply an expanded version, accommodating the many relevant publications on neural tube defects which have arisen in more than a decade since the first edition appeared. Indeed, the chapter headings are remarkably similar. But much has happened in the field during that time and perspectives have changed. Our knowledge used to be mainly of an epidemiological nature; now, there are many different considerations: comprehensive screening and prenatal diagnosis, primary prevention, ethical implications, and animal models. All this has led to the book being essentially rewritten. However, the authors have chosen to retain the old chapter headings and subheadings as the basis, and then to introduce some new ones to complete the contemporary picture. For instance, the section on ‘Clustering in time and space’ has been transformed. Four pages have become 58 and now include conceptual issues, an extensive review of statistical methods, and then the clustering of neural tube defects under three headings – a review of studies initiated when there was no known aetiological factor, when clustering was suspected, and when there were specific environmental indications. For some chapters, the expertise of other eminent people has been called upon. The title too remains unchanged, and, as this suggests, the book is still largely a survey of epidemiological studies. As such it provides a unique wealth of information. But it is not just a review of previous publications: its strength lies in its analytical approach, which draws together the myriad lines of evidence and synthesises them, attempting to extract meaningful information.

Inevitably, one searches the text for mention of one’s own work, justifying such action on the grounds that it will be a yardstick for the book as a whole. The initial gratification that one has been noticed soon gives way to critical appraisal of how the work has been summarised and what use has been made of it. My self-indulgence leads me to conclude that the coverage is both comprehensive and accurate. It is regrettable that this book, like so many others, is dated before it is published: there are references only up to the first quarter of 1991 and this book could be speeded up. Nevertheless, the authors are to be congratulated on providing us with such a rich reservoir in which to delve. It is a pleasure to read and is a constant reminder that although much is known about neural tube defects there still remains much to be discovered.

A H BITTLES

MARY J SELLER

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